

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

To:

see form PCT/ISA/220

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/EP2004/004476

International filing date (day/month/year)  
28.04.2004

Priority date (day/month/year)  
02.05.2003

International Patent Classification (IPC) or both national classification and IPC  
D04B15/68

Applicant  
SANTONI S.P.A.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/EP2004/004476

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**Box No. II Priority**

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1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	5-7,9-14,16,17,21-24
	No: Claims	1-4,8,15,18-20
Inventive step (IS)	Yes: Claims	7,9-14,16,17
	No: Claims	5,6,21-24
Industrial applicability (IA)	Yes: Claims	1-24
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

Comments concerning section V:

1. US-A-3 990 270 which is considered as closest prior art and which will be referred to as D1 hereinbelow, already discloses a circular knitting machine (10) comprising a needle cylinder (15, 200) with a plurality of axial slots (16), needles (17, 201) and means (20, 32; 204, 210) for actuating the needles as set out by independent claim 1, wherein a sub-needle (20, 204) arranged in the corresponding axial slot (16) is connected bilaterally (see column [=col.] 1, lines [=l.] 45-51) to the corresponding needle (17, 201), said sub-needle being able to oscillate on a radial plane of the needle cylinder (see col.3, l.9-11; col.9, l.53-54) in order to pass from an active position (Figs. 5 and 12), in which the sub-needle (20, 204) is extracted radially with its heel (25, 205) from the corresponding axial slot (16) of the needle cylinder so as to engage paths (30, 207) formed by sub-needle actuation cams (35, 36, 37), which are arranged around the needle cylinder (15, 200) and are suitable to produce or allow a movement of said sub-needle along the corresponding axial slot of the needle cylinder (col.3, l.31-43), to an inactive position (Figs. 4 and 13), in which it is embedded with its heel (25, 205) in the corresponding axial slot (16) of the needle cylinder (15, 200) so as to avoid engaging said sub-needle actuation cams (col.3, l.15-30; col.9, l.57-65); sub-needle actuation means (32, 210) being provided which act on said sub-needle (20, 204) for its transition from said active position to said inactive position (col.7, l.34-62; col.9, l.66 - col.10, l.17).

The subject-matter defined by independent claim 1 is therefore not new and would therefore appear not to meet the requirements of Article 33(2) PCT.

2. The features according to the following embodiments of the invention are either known in conjunction with the features mentioned in the independent claims from D1 or else are suggested for the respective technical purpose by GB-A-1 416 179, which is henceforth referred to as D2.

<u>Claim</u>	<u>Source</u>
2	D1: col.3, l.68 - col.4, l.9;
3	D1: col.3, l.15-20; col.9, l.66 - col.10, l.1;
4	D1: col.4, l.65 - col.5, l.2;
5, 21	D2: page [=p.] 5, l.114-118;
6	D2: p.8, l.36;

8	D1: Fig.6;
15	D1: col.3, l.36-38; D2: p.5, l.82-86;
18	D1: col.7, l.49-51;
19	D1: Fig.1; D2: Fig.4;
20	D1: col.2, l.61-66; D2: p.5, l.7-9;
22, 23	D2: Fig.4;
24	D2: p.1, l.16-19;

The subject-matter according to dependent claims 2 to 6, 8, 15, 18 to 24 would therefore appear not to meet the requirements of Article 33(2) or (3) PCT.

3. None of the cited documents discloses the features of the embodiments according to dependent claims 7, 9 to 14, 16, 17. Due to lack of indication, inclusion of these features in a circular knitting machine otherwise according to D1 or D2 is not considered obvious.

The subject-matter defined by claims 7, 9 to 14, 16, 17 would therefore appear to meet the requirements of Articles 33(2) and (3) PCT.

4. The subject-matter according to claims 1 to 24 would be susceptible to industrial application and thus meet the requirements of Article 33(4) PCT.

Comments concerning section VII:

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.
2. Contrary to the requirements of Rule 6.3(b) PCT, the independent claim 1 is not correctly cast in the two-part form with respect to the closest prior art (see point V.1. above).
3. Contrary to the requirements of Rule 6.2(b) PCT, starting with claim 2 features mentioned in the claims and denoted by reference signs in the drawings are not accompanied by corresponding reference signs quoted in brackets.
4. The units of measure "inch" employed in claim 24 and on page 10 is not

additionally expressed in terms of the units stipulated by Rule 10.1(a) PCT.

Comments concerning section VIII:

1. Dependent claims 4, 7, 10 to 14, 16, 17, 22, 23 refer to "said" members of the apparatus like an actuation element, a selector, an upper portion of an actuation element, first and second prongs, a pusher, selector actuation cams, first and/or second rising portions, needle actuation cams, selection devices, the context of which with the remainder of the features recited by independent claim 1 is not clear, contrary to the requirements of Article 6 PCT.